Household Food Security Data Consensus Statement

By the Australian Household Food Security Data Coalition (AHFSDC)
December 2022
Key messages:

• Food insecurity in Australia is increasing, but a lack of consistent, regular monitoring and reporting of food insecurity using comprehensive, validated tools is limiting timely intervention.

• Regular monitoring is urgently needed from state/territory and federal governments. Reporting of the prevalence of household food security needs to reflect levels of severity (marginal, moderate and severe food insecurity) in each state and territory across Australia.

• Commonly used short tools comprising one or two questions are inadequate for assessing the true prevalence of food insecurity and result in serious underestimation.

• The United States Department of Agriculture (USDA) 18-item Household Food Security Survey Module (HFSSM) should be adopted across settings to provide the most valid, internationally comparable data on food insecurity for both adults and children.

About this statement

This Consensus Statement was prepared and approved by the Australian Household Food Security Data Coalition (AHFSDC). AHFSDC is comprised of concerned professionals who work on and research food insecurity across the disciplines of Public Health, Epidemiology, Nutrition, Sociology and Geography. This statement will be updated in the future.

Contents

1. Food security defined 3
2. The increasing prevalence of food insecurity in Australia 4
3. Food insecurity impacts 4
4. Australia needs consistent household food security data collection 5
5. Recommended measurement tool: 18 item Household Food Security Survey Module (HFSSM) 6
6. Coding position: ‘marginal food insecurity’ is distinct from ‘food secure’ 7
7. Governments should be responsible for collecting household food security data with the assistance of Aboriginal Community Controlled Health Services 8
8. Steps for action 8
9. References 9
10. List of contributors and members of the AHFSDC 10
1. Food security defined

Food security exists when all people, at all times, have physical, social and economic access to sufficient, safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life\textsuperscript{1,2}. In contrast, food insecurity occurs if these needs are not met or if food is not accessible in a socially acceptable way.

It is a fundamental human right for all Australians to be able to put healthy food on the table every day.

Food security is multi-dimensional (Figure 1), encompassing food availability, food accessibility (both financial and physical access), food utilisation (processing and consumption of food), stability (stability in the other pillars over time), agency (the capacity to make decisions about food), and sustainability (viability of food systems)\textsuperscript{3}.

Food insecurity is considered to range in severity from the experience of anxiety that food will run out (marginally food insecure), to a reduction of the quality, variety and amount of food consumed (moderately food insecure), to regularly skipping meals or going without food at all (severely food insecure) as shown in Figure 2\textsuperscript{4,5}.

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{food_security_figure.png}
\caption{Dimensions of Food Security}
\end{figure}

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{food_insecurity_spectrum.png}
\caption{The spectrum of severity of food insecurity}
\end{figure}
2. The increasing prevalence of food insecurity in Australia

Research during the COVID-19 pandemic in Australia has documented a large increase in the prevalence of food insecurity amid lockdowns and supply chain instability\textsuperscript{6-8}, in addition to economic vulnerabilities for many households\textsuperscript{9}. When social support payments were increased during the COVID-19 lockdowns, people receiving the higher JobSeeker payment reported being able to afford to eat healthier diets and more regularly\textsuperscript{10-12}. However, the temporary nature of these income supports have not changed the major determinants of food insecurity\textsuperscript{11}.

In 2022, amid global instability, rapid inflation and natural disasters that have influenced the food supply chain, increased grocery costs and household bills are forcing people to compromise their nutrition. In 2022 the Australian Council of Social Services (ACOSS) reported that among people receiving JobSeeker or other social support payments, nearly all had reported their grocery bills had increased, and most were eating less or skipping meals (62%), and cutting back on meat, fruit and vegetables (71%)\textsuperscript{13}. Due to limited national, regular and robust data collection, the extent to which the rising cost of living is impacting food security in Australia is currently unknown.

**Australia needs consistent, regular, comprehensive and culturally appropriate data collection on food insecurity to create timely solutions.**

3. Food insecurity impacts

Food insecurity is a powerful social determinant of health and can have both short- and long-term adverse consequences for both adults and children. Food insecurity directly impacts health as eating enough healthy food is important for overall wellbeing. People experiencing food insecurity are less likely to consume a healthy and varied diet\textsuperscript{14} placing them at greater risk of diet-related chronic disease\textsuperscript{15}. Food insecurity also indirectly impacts participation in employment, education, and reduces social and community connection\textsuperscript{5}. Consequently, food insecurity is connected to both physical and mental health conditions\textsuperscript{16}.

**Among adults, food insecurity is associated with an increased risk of chronic conditions including diabetes and hypertension, and anxiety, depression, and mood disorders. Among children, food insecurity is associated with poor general health, atypical or problematic behaviour, and delayed development. Severe food insecurity can also lead to nutritional deficiencies, and weight loss or weight gain.**\textsuperscript{16}

These preventable outcomes have profound influences on the health of Australians and burden the nation’s health system. As such, food insecure households need to be a key priority target for government public health interventions that focus on the causes of food insecurity such as poverty and inadequate government support payments.
4. Australia needs consistent household food security data monitoring and surveillance

Other high-income countries, including Canada and the United States of America (USA), regularly monitor the severity of food insecurity experienced at the household level. Using comparable measures of food security can allow the comparison of the prevalence and severity of food insecurity, at a national and sub-national level, as well as allow comparisons with other countries.

In Australia, there is a lack of consistent, regular monitoring and reporting of food insecurity using comprehensive, validated tools. Australia is currently relying on outdated 10-year-old data from the Australian Bureau of Statistics (ABS)\(^{17}\) at a national level which cannot respond to rapidly changing contexts, such as the COVID-19 pandemic and the 2022 cost of living crisis. At present, the charitable organisation Foodbank has stepped up to help fill this knowledge gap via their Hunger Reports. Whilst the reports are useful for observing general trends, food security policy and responses must be underpinned by independent, rigorous data collection from nationally representative sampling regimes.

The sporadic nature of data availability is problematic as it prevents timely interventions\(^{18}\). Timely, transparent, representative and comprehensive datasets related to food insecurity in Australia are essential. Without routine monitoring, interventions may not fully reflect the scope of the problem or address the needs of priority populations. It is important to have detailed State and Territory-based data that can also provide insight into the prevalence of food insecurity at a local and regional levels.

**We are calling for a commitment to mandatory, regular monitoring and reporting of the prevalence of marginal, moderate and severe food insecurity in each state and territory across Australia from state and federal governments.**
5. Recommended measurement tool: 18 item Household Food Security Survey Module (HFSSM).

We recommend future national and state surveys adopt the United States Department of Agriculture (USDA) 18-item Household Food Security Survey Module (HFSSM). The USDA HFSSM is best placed to determine the true prevalence of food insecurity\textsuperscript{19}. The USDA HFSSM is the most commonly used food insecurity measurement tool applied in research in high-income countries, and has been adopted in Canada and the USA – allowing for meaningful comparison between countries\textsuperscript{20}. This is a validated, standardised scale which can assess the presence and severity of food insecurity at the household level in adults and children.

The USDA HFSSM has 6, 10, and 18-item versions, and shorter iterations may be considered in some settings\textsuperscript{21}. However, it should be noted that respondent burden and time to collect data is not significantly increased when using the 18-item tool in comparison to shorter iterations (10 item, 6 item)\textsuperscript{19}. The USDA Guide to Measuring Household Food Security reports that it takes about four minutes for severely food insecure households to answer the 18-item HFSSM and two minutes for all other households\textsuperscript{19}. The time taken to administer this tool may vary in some population groups across Australia, including when the tool is interviewer administered. Further validation of this tool in some contexts may be warranted.

As the 6- and 10-item versions focus on adults only, this limits understanding of the prevalence of food insecurity in households with children\textsuperscript{21}. The 18-item HFSSM can determine the prevalence of food insecurity for households with children, a metric which is currently unknown in the Australian context. It is urgent that Australia collects data on the extent of childhood food insecurity due to the well-documented impacts of food insecurity on physical, social and mental health and education outcomes across the lifespan.

Two questions on food security were included in the 2011-12 National Nutrition and Physical Activity Survey and 2012-13 National Aboriginal and Torres Strait Islander Nutrition and Physical Activity Survey. A single item tool commonly used in Australia has been shown to underestimate the prevalence of food insecurity in the Australian context\textsuperscript{22}. As short tools comprising one or two questions underestimate food insecurity, we do not recommend their use for monitoring and surveillance purposes.

Details of the recommended 18 item Household Food Security Survey Module (HFSSM) can be found here:

6. Coding position: ‘marginally food insecure’ is distinct from ‘food secure’

The 18-item HFSSM includes 10 questions for households with adults only and an additional 8 questions for households with children. Wherever possible, data should be reported according to the four food security status groups for households with and without children, as is suggested by PROOF Canada\textsuperscript{23}. The criteria for categorising households according to their food security status using the 18-item HFSSM is provided in Table 1. If a binary variable (food secure/food insecure) is used, marginally, moderately and severely food insecure households should be included to provide a composite measure of ‘food insecure’.

\begin{table}[h]
\centering
\begin{tabular}{|c|c|c|}
\hline
Food security status & 10 item adult food security scale & 8 item child food security scale \\
\hline
Food secure & No items affirmed & No items affirmed \\
\hline
\multirow{2}{*}{Food insecure} & Marginally food insecure & Affirmed no more than 1 item on either scale \\
\multirow{2}{*}{} & Moderately food insecure & 2 to 5 affirmative responses \\
\multirow{2}{*}{} & Severely food insecure & 6 or more affirmative responses \\
\hline
\end{tabular}
\caption{Determining food security status based on the 18-item USDA HFSSM}
\end{table}

The approach and names of the four groups are a minor deviation from the USDA HFSSM user notes, which categorises households into High, Marginal, Low and Very Low Food Security groups. However, our recommended approach aligns with research teams internationally\textsuperscript{24}, including the latest national food security reports from Canada\textsuperscript{23}. Our approach recognises the increased anxiety over food procurement and lack of agency over food decisions for marginally food insecure groups, in addition to the fact that people in marginally food insecure households experience poorer health outcomes compared to food secure households.

We recommend four groups for food security status be reported (1) food secure; (2) marginally food insecure; (3) moderately food insecure and (4) severely food insecure.

If a binary variable is used marginally, moderately and severely food insecure should be grouped as ‘food insecure’.
7. Governments should be responsible for collecting household food security data with the assistance of Aboriginal Community Controlled Health Services

Research has revealed that the majority of people experiencing food insecurity do not seek help from food relief organisations\textsuperscript{25}. The charitable sector should not be primarily responsible for the ongoing and regular monitoring of food insecurity in Australia as they are unable to ascertain the true prevalence as samples are not representative of the population. Federal level data, collected through regular and consistent ABS national health surveys and the four longitudinal surveys funded by the Department of Social Services\textsuperscript{*} could provide essential information on the food security status of Australian households. State and Territory level data, collected through population health surveys, should be used to provide regional level data to inform State public health interventions. Local level data, collected through local government and local area health districts could be used to ensure timely interventions with at-risk populations. We affirm the position of the Public Health Association of Australia\textsuperscript{26} that it is important to “involve those affected by food insecurity in the response [to food insecurity]”\textsuperscript{26}.

Aboriginal Community Controlled Health Services (ACCHSs) and the relevant peak bodies in each state and territory, play a key role in providing culturally safe and appropriate programs and services for the communities in which they operate\textsuperscript{27}. Modified versions of the USDA HFSSM have been developed and validated for use with Aboriginal and Torres Strait Islander Groups\textsuperscript{28,29}. Given the history of the Stolen Generations and the continuing high numbers of Aboriginal and Torres Strait Islander children being removed today\textsuperscript{30}, there are sensitivities around some of the questions included in the USDA HFSSM 18-item survey\textsuperscript{31}. Therefore, to ensure self-determination, trust and cultural safety, ACCHSs should be adequately resourced and trained to administer the survey\textsuperscript{28}. Indigenous peoples in particular “must be key stakeholders in policy action to address food insecurity with the right to participate in all decisions affecting them including protecting and acknowledging their connection to the land”\textsuperscript{26}.

8. Steps for Action

We are asking governments to:

\begin{itemize}
  \item Commit to mandatory, regular monitoring and reporting of the prevalence of marginal, moderate and severe food insecurity in each state and territory across Australia from state/territory and federal governments.
  \item Adopt the USDA 18-item household food security survey module to provide the most valid and internationally comparable data, and capture the experience of food insecurity for both adults and children.
  \item Ensure that there is sufficient population sample size in State and Territory level data collection in order to determine the prevalence of food insecurity at a local government or regional level.
  \item Ensure timely and targeted policy responses to and measures of food insecurity.
\end{itemize}

\textsuperscript{*}(1) The Household, Income and Labour Dynamics in Australia (HILDA) Survey; (2) the Longitudinal Study of Indigenous Children (LSIC), (3) The Longitudinal Study of Australian Children (LSAC) and (4) Building a New Life in Australia: The Longitudinal Study of Humanitarian Migrants
9. References


27. The Centre of Research Excellence in Aboriginal Chronic Disease Knowledge Translation and Exchange (CREATE). Aboriginal Community Controlled Health Organisations in practice: Sharing ways of working from the ACCHO sector. Wardipinarripga Aboriginal Health Equity Theme, South Australian Health and Medical Research Institute, Adelaide, 2020


29. McCarthy L. Household food security and child health outcomes in families with children aged 6 months to 4 years residing in Darwin and Palmerston, Northern Territory, Australia. Charles Darwin University (Australia); 2017.


10. List of contributors and members of the AHFSDC

- Dr Miriam Williams, Senior Lecturer, Geography and Planning, Macquarie University
- Dr Katherine Kent, Lecturer in Public Health, School of Health Sciences, Western Sydney University
- Simone Sheriff, Project Officer and PhD Candidate, The Sax Institute
- Dr Sue Kleve, Senior Lecturer, Dept of Nutrition, Dietetics and Food, School of Clinical Sciences, Monash University
- Dr Stephanie Godrich, Senior Lecturer, School of Medical and Health Sciences, Centre for People, Place and Planet, Edith Cowan University.
- Sandra Murray, Lecturer Food, Nutrition and Public Health, University of Tasmania
- Associate Professor Seema Mihrshahi, Associate Professor in Public Health, Department of Health Sciences, Macquarie University
- Elizabeth Millen, Australian Right to Food Coalition
- Associate Professor Fiona McKay, School of Health and Social Development and Institute of Health Transformation, Deakin University
- Dr Rebecca Lindberg, Post-Doctoral Research Fellow, Institute for Physical Activity and Nutrition (IPAN), School of Exercise and Nutrition Sciences, Deakin University. Director of The Community Grocer.
- Professor Karen Charlton, School of Health, Indigenous and Health Sciences, University of Wollongong.
- Professor Danielle Gallegos, Faculty of Health, School of Exercise and Nutrition Sciences, Queensland University of Technology and SHARE Collaboration
- Dr Miri (Margaret) Raven, Senior Scientia Lecturer, University of New South Wales
- Jacqueline Davison, Senior Research Officer, The Sax Institute.
- Professor Amanda Lee, Professor Public Health Policy, School of Public Health, The University of Queensland
- Professor Carol Richards, Sustainable Food Systems, School of Management, Business School, Queensland University of Technology
- Dr Francis Markham, Research Fellow at the Centre for Aboriginal Economic Policy Research (CAEPR), Australian National University
- Berbel Franse, Program Manager at Healthy Cities Illawarra on behalf of Food Fairness Illawarra